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## The impact of economic factors on the development of rural tourism: Lithuanian case

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### Abstract

Authors of the article elaborate economic factors and using calculations indicate the influence of these factors on the development of rural tourism. The research results revealed that the number of guests in rural farmsteads (values of correlation coefficient are ranging from 0.73 to 0.91) is strongly affected by all economic factors (excluding inflation) analysed in the research: GDP per capita, average monthly gross earnings, foreign direct investments, government expenditure and revenue, tangible investments per capita. Meanwhile, the development of rural farmsteads are firmly influenced on average gross monthly earnings, foreign direct investments, government expenditure (correlation coefficient is above 0.9).

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**Keywords:** Rural tourism; development; development of rural tourism; economic factors.

### 1. Introduction

Tourism is one of the most efficient economic branches that successfully compete with the other farm branches of production and trade products (Žilinskas, Petravičienė, 2007). According to Navickas and Malakauskaitė (2010), it is one of the most fast growing economic segments that deals with challenges and opportunities of global competitive market. Skuras, Petrou, Clark (2006) state that tourism demand has more than doubled in Europe during the last 20 years, and “its economic impact is equally impressive”. Rural tourism is a significant part of Lithuanian tourism sector, which differs with its originality, provided services and competitive features. These qualities are very important in shaping regional and state image of tourism; moreover, it promotes the growth of inbound tourism. In

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recent years, more and more growing rural tourism becomes a real competitor to resorts and hotels. It also became inexpensive alternative for holidaymakers. It is business, which covers various activities in one rural tourism farmstead and also forms whole tourism market (Petrauskienė, 2004). Lopez, Garcia (2006) point out that rural tourism is one of the fastest spreading areas of tourism. It mostly appears in less developed countries, where the number of people living is relatively big. It is a specific branch of tourism, for which exclusive attention has to be shown. Rural tourism is based on the development of the whole farm offering the services as well as on the economic and social development of rural areas. Jaszczak, Žukovskis (2010) highlights “the livelihood of country people and stopping their migration to cities has become important factors determining this development.”

According to Ališauskas, Jankauskienė (2008), rural tourism is important by two aspects:

- Rural tourism creates economic and social benefits for countryside. It is an attractive activity type for youth and also a source of a workplace and income for country people. The rush of vacationers affects the diversity of provided services; moreover, it spreads agricultural market.
- Rural tourism is an effective means of saving nature, culture and tradition values. Tourism provides significance to landscape protection, reconstruction to old manors and palaces, the research of social and historical researches and it also increases community members' interest in nature and culture of other lands.

Radac, Csősz, Iulianamercu, Matias, Dobra (2012) correctly argue that economic benefits from rural tourism can take such forms as employment, increased spending in the community, economic diversification, farmers markets, infrastructure.

The main problem analysed in the article is revealed investigating data of rural tourism development sectors. The data shows that Lithuanian rural tourism development was not that intense in recent years. On the other hand, a growing tendency of guests in rural tourism farmsteads can be clearly seen. According to data of Lithuanian Statistics Department, about 90% of guests in rural tourism farmsteads are Lithuanian people. It is important to identify the factors that determine development of rural tourism, especially when trying to achieve more foreign people. The various aspects of rural tourism development were analysed by these scientists: Skuras et al. (2006), Žilinskas, Petravičienė (2007), Ališauskas, Jankauskienė (2008), Ramanauskienė, Astromskienė, Andriūnas (2010), Romikaitytė, Kisieliauskas (2012), but in general, there is lack of analysis about factors that influence the development of rural tourism.

Amelung (2006) states that analysing specific tourism sector and its development, the attention has to be drawn to four main factors: economic, social, environmental and cultural, from which economic factors have the greatest influence on a successful tourism sector development. Sinkienė (2008) has drawn attention to the fact that a more detail analysis of economic external environment helps to identify factors that influence the growth and the stagnation of rural tourism.

The aim of the study is to determine the impact of economic factors on rural tourism development.

## 2. Method

Analysing economic factors that determine the development of Lithuanian rural tourism, such general research methods were used - systematic, logical and comparative analysis of scientific literature, synthesis. The article is based on scientific literature, statistical data (Lithuanian Department of Statistics, the World Bank statistics, State Department of Tourism), mathematical statistical analysis and specialized electronic information sources. Researching and analysing the impact on the factors in rural tourism, statistical correlation method was used. The correlation analysis is applied to quantify the relation, the correlation between number of guests in rural farmsteads, number of rural farmsteads and selected economic factors such as GDP per capita, average monthly gross earnings, foreign direct investments, government expenditure and revenue, tangible investments per capita, inflation and unemployment rate in Lithuania. The data were gathered between the years of 2004 and 2012.

The correlation coefficient measures the significance of statistical dependence between two quantitative variables. The linear correlation coefficient is calculated by the following formula (Boguslauskas, 2004):

$$r = \frac{\overline{xy} - \bar{x} \bar{y}}{\sigma_x \sigma_y} \quad (1)$$

where:  $\overline{xy}$  - the average of both variables multiplication,  $\bar{x}$  - average of one variable,  $\bar{y}$  - average of another variable,  $\sigma_x, \sigma_y$  - standard deviations of variables.

The value of correlation coefficient can vary in the range from -1 to +1. There are possible interpretations of the correlation coefficient  $r$  (Boguslauskas, et al., 2009):

- from 0.9 till 1.0 (from -0.9 till -1.0) - very strong positive (negative) linear correlation;
- from 0.7 till 0.9 (from -0.7 till -0.9) - strong positive (negative) linear correlation;
- from 0.5 till 0.7 (from -0.5 till -0.7) - average positive (negative) linear correlation;
- from 0.3 till 0.5 (from -0.3 till -0.5) - weak positive (negative) linear correlation;
- from 0.3 till 0 (from -0.3 till 0) - very weak positive (negative) linear correlation.

### 3. Results

Tourism is an important sector in the aspects of economic and social development, the country's image and the international cooperation. Skuras et al. (2006) point out “Tourism is widely recognized as the world’s largest and fastest growing industry, and there is no indication that its growth is likely to end”. According to WTO data, tourism annually employs to 10 % of global workforce and creates 7 % of world’s GDP. The Lithuanian statistical data shows that tourism sector created 3 billion LTL added value or 2.9% of country’s GDP last year.

The development of Lithuanian tourism is determined by processes of economic integration and development of international relations with the world. Lithuania has favourable opportunities to develop rural tourism, but these conditions are under-used. According to Ramanauskienė, Vagonis (2010), success of rural tourism business is becoming increasingly dependent on the service suppliers’ ability to meet the changing consumers’ needs and to offer new high-quality services. It is important to note that the average growth of rural tourism is 5-7%, while compared with the year of 2011, the growth was 11 %. Lithuanian Department of Statistics reports that in 2012, 605 rural tourism farmsteads provided accommodation services (in 2011- 615 rural tourism farmsteads). 260.7 thousand guests visited rural tourism farmsteads, of whom about 22.6 thousand were foreigners. Most of the foreigners were from Poland, Russia, Germany and Latvia. In 2012, compared to 2011, rural tourism farmsteads accommodated 2.5% more Lithuanian residents and 9.6 % more foreigners. As it was mentioned earlier, 91 % of all the guests in rural tourism farmsteads were Lithuanian residents.

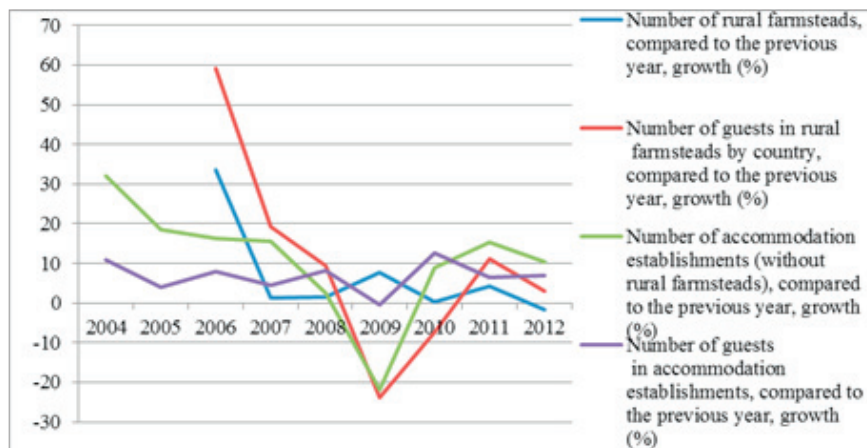


Fig.1. Growth of Lithuanian tourism sector and rural tourism, compared to the previous year

Figure 1 shows the development trend of Lithuanian tourism (without rural tourism) and the trend of rural tourism separately, i.e. the growing dynamics of guests and accommodation establishment. On this basis, a

conclusion can be drawn that development of rural tourism in Lithuania is intensifying, but hardly growing after the economic crisis, which began in Lithuania at the end of the year 2008. Therefore, the main task is to estimate the factors which influence the development of rural tourism and to determine their impact power.

Rural tourism, as well as each national economy sector or corporate entity, is influenced by outside (macro environment) and internal (micro environment). Macro environment factors will be further analysed more precisely.

Freyer (1995) excludes five groups of macro environmental factors affecting tourism, as well as rural tourism: economic, ecological, political, social and technological factors while Amelung (2006) identifies economic, social, natural environment and cultural factors. In addition to the factors above, Romikaitytė, Kisieliauskas (2012) note legal factors.

To conclude the analysis of the scientific literature, authors analyse groups of economic factors (GDP, foreign investments, capital investments, inflation and etc.), socio-demographic (the cost of living, immigration, education, health status, etc.), political-legal (political stability in the country, the European Union's support, etc.), environmental (pollution prevention, environmental protection, etc.), natural and geographical environment (climate, geographical position of the country, transport infrastructure, landscape, seasonal, etc.) cultural and other factors.

As it has been mentioned above, the greatest influence on the development of rural tourism does economic factors. Ramanauskienė et al. (2010) identify these main economic factors which influence rural tourism development: GDP, wage, inflation, unemployment level, interest rates, government expenditure and foreign investments, while Romikaitytė, Kisieliauskas (2012) focus on inflation, arrival tourist' flows from the countries, GDP per capita, tangible investments, establishment of tourism companies in the country. Ramanauskienė et al. (2010) research showed that such factors as GDP, inflation and unemployment rate indirectly affect the development of rural tourism, while other factors directly increase the competitiveness of the tourism sector, for example, EU support increases the number of rural tourism farmsteads and facilitate rural tourism business environment.

Snieška (2002) drew attention to the fact that GDP is the most important economic factor for the development of rural tourism.

Table 1 presents indicators of very important tourism markets for Lithuania (Poland, Germany, Latvia, and Russia): GDP per capita and number of guests in rural tourism farmsteads by respective country.

Table 1. GDP per capita and number of guests in Lithuanian rural farmsteads by country

| Indicators   | Country   | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  |
|--|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| GDP per capita,<br>(currency \$)   | Poland    | 6620  | 7963  | 8958  | 11157 | 13886 | 11295 | 12302 | 13382 |
|  | Germany   | 33040 | 33543 | 35238 | 40403 | 44132 | 40270 | 40145 | 44315 |
|  | Latvia    | 5950  | 6973  | 8713  | 12638 | 14858 | 11476 | 10723 | 13838 |
|  | Russia    | 4109  | 5337  | 6947  | 9146  | 11700 | 8616  | 10710 | 13284 |
|  | Lithuania | 6564  | 7604  | 8865  | 11584 | 14071 | 11034 | 11046 | 14148 |
| Number of guests<br>in Lithuanian rural<br>farmsteads by country, thous. | Poland    | 1.8   | 3.1   | 3.5   | 7.5   | 6.5   | 5.7   | 3.9   | 4.6   |
|  | Germany   | 4.3   | 4.8   | 6.9   | 7     | 8     | 6.1   | 2.3   | 3     |
|  | Latvia    | 1.5   | 2.2   | 3.9   | 5.5   | 4.4   | 3.5   | 1.4   | 2.8   |
|  | Russia    | 0.9   | 1.3   | 1.9   | 2.3   | 2.5   | 3.3   | 1.5   | 3.5   |
|  | Lithuania | 90    | 137.1 | 220.7 | 259.2 | 288.2 | 217.8 | 214.2 | 232.2 |

Source: compiled by the authors based on Statistics Lithuania and the World Bank data (2013)

In all cases GDP (except Germany) positively correlates with arrival tourists' flow from appropriate country. Lithuanian (correlation coefficient  $r=0.85$ ) and Russian ( $r=0.81$ ) cases show strong correlation, Latvian ( $r=0.51$ ) and Polish ( $r=0.69$ ) positive average correlation, which shows these countries' GDP growth strong, positive influence for a tourists' flow to Lithuanian rural farmstead. The German case shows very weak negative relation ( $r=0.01$ ), which means that German GDP does not influence tourists' flow to Lithuanian rural farmsteads. According to

Ramanauskienė et al.(2010), the growth of GDP indirectly stimulates tourism growth. In order to specify the results, a more detail research has to be done to find out what led to decrease of German guests in Lithuanian rural farmsteads.

Table 2 presents the calculated results of the research, e.g. values of the correlation coefficients between selected economic factors and the number of guests in rural farmsteads or number of rural farmsteads.

Table 2. Values of correlation coefficient between economic factors and indicators of rural tourism

| <b>Economic indicators</b>      | <b>Number of rural farmsteads</b> | <b>Number of guests in rural farmsteads</b> |
|---------------------------------|-----------------------------------|---|
| Unemployment                    | 0.361                             | -0.243                                      |
| Average monthly gross earnings  | <b>0.916</b>                      | <b>0.819</b>                                |
| Foreign direct investments      | <b>0.922</b>                      | <b>0.778</b>                                |
| Government expenditure          | <b>0.917</b>                      | <b>0.794</b>                                |
| Government revenue              | <b>0.879</b>                      | <b>0.911</b>                                |
| Tangible investments per capita | 0.186                             | <b>0.725</b>                                |
| Inflation                       | 0.259                             | <b>0.746</b>                                |

Source: calculated by the authors

A very strong positive relationship exists between the number of rural farmsteads and such economic factors as average monthly gross earnings, foreign direct investments, and government expenditure ( $r > 0.9$ ). It indicates that these factors influence the development of rural farmstead the most. Meanwhile, all economic factors, except unemployment, affect the number of guests in rural farmstead strong or very strong (all  $r > 0.7$ ). According to calculations, unemployment makes a slight negative impact on the number of guests in rural farmstead. On this basis a conclusion can be drawn that the greatest impact on the development of rural tourism makes government revenue and expenditure growth (directly implemented government tourism policy and given support), rising wages (the greater part of the earned money is used on leisure and recreational activities), the growth of foreign investments, the growth of intangible investments (investments in the country's infrastructure create favourable conditions for the development of tourism activities, creating an attractive image of the country and promoting inbound tourism). However, it should be noted that not only the quantitative variables, but also qualitative, such as politics, people's satisfaction level and similar factors influence economic processes.

#### 4. Conclusions

The analysis of scientific literature leads to the conclusion, that the increase of rural tourism income and employment would help the social and economic development. Tourism can be significant source of creating new work places in rural communities, moreover, it also helps to maintain and develop local culture in rural areas. Rural tourism not only offers business opportunities to local residents, but also encourages rural areas regeneration and development of economy, and also increases quality of life for visitors and rural communities.

The promotion of rural tourism reflects in developed infrastructure of the country, increased supply of tourism services in order to attract more tourists and satisfy their needs. It requires a strategic, political and economic planning and sustainable decision-making in both - the public and private sector.

While analysing rural tourism development, it is necessary to draw attention to the economic, social, cultural, ecological and political factors in order to determine their level of impact. It would help to provide measures for further development of rural tourism.

After the calculations, it was revealed that the highest impact on the development of rural tourism is made by these economic factors: government revenue and expenditures, wage, foreign investments, tangible investments, GDP per capita.

It must be recognized that national government together with the Department of Tourism can influence a positive impact on development of rural tourism, for example, ensuring the management of inflation jumps, increasing investments in infrastructure, investing in a positive image of the country abroad and etc.

## References

- Amelung, B. (2006). Global (Environmental) Change and Tourism. University of Maastricht.
- Ališauskas, K., Jankauskienė, A. (2008). Kaimo plėtros tendencijos Plungės rajone. *Ekonomika ir vadyba: aktualijos ir perspektyvos*, 2, 34–43. ISSN1648-9098.
- Boguslauskas V. (2004). *Ekonometrikos pagrindai*. Kaunas: Technologija.
- Boguslauskas V., Blikienė R., Grondskis G., Maksvytis L. (2009). *Ekonometrija. Regresijos modeliai. Ekonometrikos laboratoriniai darbai*. Kaunas: Technologija.
- Freyer, W. (1995). Tourism environment. In Structure, performance and competitiveness of European tourism and its enterprises, European Commission.
- Jaszcak, A., Žukovskis, J. (2010). Tourism Business in Development of European Rural. *Management theory and studies for rural business and infrastructure development*, 20.
- Lopez, E. P., Garcia, F. J. C. (2006). Agrotourism, Sustainable Tourism and Ultraperipheral Areas: The Case of Canary Islands. PASOS. *Revista de Turismo y Patrimonio Cultural*, 4.
- Navickas, V., Malakauskaitė, A. (2009). The Possibilities for the Identification and Evaluation of Tourism Sector Competitiveness Factors. *Engineering Economics*, 1.
- Petrauskienė, R. (2004). Rinkodaros sprendimai kaimo turizmo įmonėse. *Kaimo verslo vadyba: teorija, studijos, Praktika, 1*. Kaunas.: Akademija.
- Radac, A. B., Csösz, I., Iulianamercu, I., Matiaș, C. G., & Dobra, C. I. (2012). The benefits of rural tourism. In Sustainable Rural Development. *International Scientific Symposium*, Timișoara, Romania, 25 May 2012, 14(4), 369–372.
- Ramanauskienė, J., Astromskienė, A., Andriūnas, V. (2010). Lietuvos kaimo turizmo verslo konkurencingumo didinimo priemonės. *Management theory and studies for rural business and infrastructure development*, 5(24). Research papers.
- Ramanauskienė, J., Vagonis, Z. (2010). Kaimo turizmo ir amatų sąveikos nauda, skatinimo galimybės. *LŽŪU mokslo darbai*, 86(39).
- Romikaitytė, B., Kisieliauskas, J. (2012). Lietuvos turizmo sektoriaus plėtrai įtaką darantys veiksniai. *Management theory and studies for rural business and infrastructure development*, 2(31). Research papers.
- Sinkienė, J. (2008). Miesto konkurencingumo veiksniai. *Viešoji politika ir administravimas*, 25, 19–21.
- Snieška, V. (2002). Klasteriai: raktas į regionų konkurencingumo didinimą. *Inžinerinė ekonomika*, 18.
- Skuras, D., Petrou, A., Clark, G. (2006). Demand for rural tourism: the effects of quality and information. *Agricultural Economics*, 35(2006), 183–192.
- State Department of Tourism (2013). Available from <http://tourism.lt/en/>
- Statistics Lithuania. (2013). Official statistics portal. Available from <http://www.stat.gov.lt/en/paslaugos>
- The World Bank Group (2013). Available from <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD?page=1>
- Žilinskas, V. J., Petravičienė, L. (2007). Turizmo verslas: plėtros konceptualizacija ir tendencijos Lietuvoje. *Ekonomika ir vadyba-2007. Tarptautinės mokslinės konferencijos pranešimų medžiaga*. Kaunas: Technologija.
- World Trade Organization. Available from <http://www.wto.org/>